STATE OF ALASKA
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF MINING, LAND AND WATER
SOUTHCENTRAL REGION LAND OFFICE

PRELIMINARY BEST INTEREST FINDING
AQUATIC FARMSITE LEASE

APPLICANT: Casey Havens
ADL #108092
Yak-Tat-Kwaan

LOCATION: Yakutat – Dolgoi Island

The Department of Natural Resources is accepting public comment on the following preliminary decision document for aquatic farm site lease proposal. **Written comments must be received on or before 5:00 p.m., Thursday, September 15, 2011.**

PROPOSED ACTION: The applicant is requesting the approval of a 34.4 acre aquatic farm comprised of 4 separate parcels for oyster culture. The proposed sites are located approximately, 4 nautical miles northeast of downtown Yakutat off the eastern shore of Dolgoi Island. The uplands are owned by Yak-Tat Kwaan, Inc. Parcel #1 is proposed to be 303 ft. x 475 feet utilizing suspended oyster gear for a total of 3.3 acres. Parcel #2 is proposed to be 431 ft. x 1475 ft, also for suspended oyster gear for a total of 14.6 acres. Parcel #3 is proposed to be 385 ft. x 1296 ft. for suspended oysters gear for a total of 11.4 acres. Parcel 4 is further broken down into 3 specific sites for intertidal bag culture. Site #1 is proposed to be 35 ft. x 520 ft for a total of 0.5 acres. Site #2 is proposed to be 77 ft. x 1130 ft. for a total of 1.99 acres. Site #3 is proposed to be 88 ft. x 1295 ft. for a total of 2.6 acres.

The total combined acreage of the sites is 34.4 acres, more or less.

The proposed farm site locations are only accessible by boat or floatplane. A location map is attached to this decision.

AUTHORITY: AS 38.05.035; AS 38.05.070; AS 38.05.075; AS 38.05.083; AS 38.05.127; AS 38.05.128; 11 AAC 63.020

This decision addresses and is based on those issues under the authority of the Department of Natural Resources (DNR) under Title 38. While other issues may be addressed that are not within the scope of DNR's responsibilities, this decision's purpose is to determine whether or not to issue a DNR lease and does not make any determinations whatsoever on the issuance of other agency authorizations that are necessary for aquatic farming activities. Information included in the original preliminary decision document may not be included in this document if conditions have not been altered. Original preliminary decisions for this lease can be obtained by contacting the aquatic farm program manager for the DNR in Anchorage.

ADMINISTRATIVE RECORD: The administrative record for this application is ADL 108092.

LOCATION:

USGS MAP COVERAGE: Yakutat (C-5) Quadrangle

NAUTICAL CHART: 16761

LEGAL DESCRIPTION:

Those tide and submerged lands located in southeast Alaska lying within:

Township 27 South, Range 34 East, Copper River Meridian,

Section 5 – East of Dolgoi Island approximately 4 miles from the city of Yakutat, according to the site drawings attached and made a part of the proposed lease under ADL 108092 and labeled Attachment B, containing 10.55 acres, more or less;

Four Parcels equaling 34.4 acres, more or less.

Parcel 1 – Suspended Oyster Culture Area - 303 feet x 475 feet = 3.3 acres

NE Corner: Latitude 59° 36.628 N Longitude 139° 41.832 W
SE Corner: Latitude 59° 36.573 N Longitude 139° 41.822 W
SW Corner: Latitude 59° 36.569 N Longitude 139° 41.921 W
SE Corner: Latitude 59° 36.623 N Longitude 139° 41.931 W

Parcel 2 – Suspended Oyster Culture Area - 431 feet x 1475 feet = 14.6 acres

NE Corner: Latitude 59° 36.525 N Longitude 139° 41.723 W
SE Corner: Latitude 59° 36.283 N Longitude 139° 41.682 W
SW Corner: Latitude 59° 36.277 N Longitude 139° 41.816 W
SE Corner: Latitude 59° 36.518 N Longitude 139° 41.863 W

Parcel 3 – Suspended Oyster Culture Area - 385 feet x 1296 feet = 11.4 acres

NE Corner: Latitude 59° 36.252 N Longitude 139° 41.483 W
SE Corner: Latitude 59° 36.246 N Longitude 139° 41.608 W
SW Corner: Latitude 59° 36.035 N Longitude 139° 41.567 W
SE Corner: Latitude 59° 36.041 N Longitude 139° 41.443 W

Parcel 4 – 3 Sites Intertidal Oyster Culture Area - Total = 5.1 acres

Site 1 – 36 feet x 560 feet = 0.5 acres
Site 2 – 77 feet x 1,130 feet = 1.99 acres
Site 3 – 88 feet x 1,295 feet = 2.6 acres

Parcels are located in the City and Borough of Yakutat

GEOGRAPHIC: The proposed farm site is located on state-owned tide and submerged lands within an unnamed bay off the eastern shore of Dolgoi Island approximately 4 miles northeast of Yakutat.

POLITICAL INFORMATION:

BOROUGH/MUNICIPALITY: This existing aquatic farm application is within the City and Borough of

Yakutat.

REGIONAL CORPORATION: Sealaska Corporation

FISH AND GAME ADVISORY COMMITTEES: Southeast Region - 5A - Yakutat Fish and Game Advisory Committee:

PLANNING AND CLASSIFICATION:

LAND MANAGEMENT PLAN: Yakataga Area Plan adopted April 1995, amended in January, 2004.

LAND CLASSIFICATION: The Yakataga Area Plan designates state-owned tidelands surrounding the proposed aquatic farm site as Fish and wildlife habitat, fish and wildlife harvest and Recreation and tourism – dispersed use. The plan classifies state-owned tidelands surrounding the proposed aquatic farm site as Wildlife habitat land and Public recreation land.

Yakataga Area Plan Management intent: Protect or enhance fish and wildlife habitat, particularly for seals, seabirds, and otters.

Protect conditions for fish and wildlife harvest, particularly for commercial fish and shellfish harvest, aquatic farming, and community harvest of salmon, crab, clams, waterfowl, and seals.

Protect or enhance conditions for dispersed recreation, particularly boating, fishing, gathering, and anchorages.

All activities will, to the extent feasible and prudent, avoid significant adverse impacts to the habitat resources, harvest activities, and recreation uses listed above.

SURFACE MINERAL ORDER: The proposed sites are open to mineral entry. No mineral closing order is proposed.

SURVEY AND APPRAISAL:

SURVEY: A survey is not required by law before issuing a 10-year negotiated lease. However, the department has the right to require one in the future, at the applicant's expense, if boundary conflicts or disputes over acreage arise.

APPRAISAL: The Division of Mining, Land and Water has approved an administrative lease fee schedule for aquatic farm sites that meet the conditions listed within the schedule. The most current lease fee schedule will be used to establish the fair market rental each lessee must pay. The applicant has the option to have a site-specific appraisal done, at the applicant's expense, before the lease is issued, if he or she does not wish to use the fee schedule. If an applicant opts for a site-specific appraisal, the division-approved appraisal will establish the rental for the lease and the fee schedule will no longer be an option.

PUBLIC/AGENCY NOTICE AND COMMENTS: Public notice of the proposal has been sent to various newspapers, post offices, agencies, boroughs/cities, native corporations, Fish and Game Advisory committees, etc. Public and agency comments are welcome during the comment period and will be considered in the final best interest finding. Only those who provide written comments during the comment period or who testify at a public hearing will be sent a copy of the final best interest finding and will be eligible to appeal. The final best

interest finding will include an explanation of the appeal process. **The public comment period begins on August 17, 2011 and will end at 5:00 p.m. on Thursday, September 15, 2011.**

The preliminary best interest finding is subject to public comments received during the comment period. The final best interest finding will consider and address any comments related to the subject proposal and will be available on or about October 10, 2011. If significant changes occur to this decision as a result of public comments received, additional notice will be sent to those who provided comments, either in writing or by testifying at a public hearing.

Evaluation by the Alaska Department of Fish and Game

I. Physical and Biological Characteristics: Based on the information provided by the applicant on the site physical and biological characteristics, the proposed sites appear capable of supporting the farm activities proposed except for Parcel 1. Details for the proposed areas are summarized below.

Protection from Oceanographic and Atmospheric Extremes: The physical exposure notes from Alaska ShoreZone imagery mapped data[1] shows the area as "protected" defined as a maximum effective fetch of < or = to 10 km. The proposed suspended and intertidal farm culture gear have a sound configuration and anchoring system and are comparable to existing farm gear used in Southeastern Alaska that can withstand ocean and atmospheric conditions.

Sufficient Environmental Conditions: The proposed aquatic farm operation project is in an area that appears to have sufficient water exchange, water temperatures, currents, salinity, and primary production to support an aquatic farm and maintain healthy environment for other marine organisms.

Sufficient Water Depth: Based on information obtained during field inspections of the site parcels made in June, the water depth at the aquatic farm site parcels ranged from 20 ft for Parcel 1 to 60 ft for Parcels 2 and 3.

There is some concern that Parcel 1 is not deep enough for the intended grow-out raft and tray system. Depending on the tidal range, the gear may be insufficient to prevent the culture gear from grounding and impacting the benthos under the floating structures. In addition, shallower depths may increase sea star infestation and predation on grow-out raft and tray culture gear. **It is recommended that the applicant drop Parcel 1 as ADF&G will not be able to issue an operation permit for this parcel at its current location due to insufficient depth.**

For Parcel 2 and 3, the depth is more than sufficient to prevent gear from grounding and affecting the benthos under floating structures.

As a note to the applicant, under circumstances where water temperatures may reach 63 degrees, culture gear used in Parcels 1-3 would not be able to be lowered into deeper recommended depths of 60 ft where cooler temperatures are found. This is an accepted ADEC corrective action practice to eliminate or decrease the possible occurrence of pathogenic stage of *Vibrio parahaemoluyticus,* known to cause gastroenteritis in humans. As of yet, there have been no reports or any outbreaks in Southeast Alaska.

Depth is not applicable for the proposed intertidal site parcels, Parcel 4-6.

[1] NOAA (National Oceanic and Atmospheric Administration), Fisheries, National Marine Fisheries Service. Alaska ShoreZone: Coastal Mapping and Imagery. http://akr-mapping.fakr.noaa.gov/szflex/ (Accessed July 2011).

Eelgrass and Kelp Beds Maintained: Eelgrass and kelp habitats are among some of the most productive and biologically diverse. Among other things, eelgrass and kelp beds helps prevent erosion and maintain stability of near-shore environments and provide food, breeding areas, and protective nurseries for fish, shellfish, crustaceans, and many other animals. Operations must be done in a manner to minimize turbidity in the area and to prevent any trampling or shading that may impact the health and abundance of eelgrass beds.

ShoreZone Imagery data[2] for intertidal areas shows patchy bio-bands of eelgrass, *Zoster* sp., adjacent to the proposed intertidal site parcel, Parcel 4. There is the potential that access to Parcel 4 or gear used at this parcel, may result in trampling or shading continuous eelgrass beds that may significantly and adversely impact the health and abundance of eelgrass beds near these sites. The following operation permit conditions will apply to this amendment to maintain the health and abundance of eelgrass beds and avoid significant adverse impacts to this important resource:

> **A 4-foot buffer zone will be required around established eelgrass beds (Zostera sp) to maintain the health and abundance of eelgrass beds in the area. You will not conduct operational activities or place culture gear within the buffer zone. If new data becomes available on eelgrass beds in the area, further measures to increase or decrease this buffer may be required. Entrance to and exit from intertidal parcels must occur where eelgrass is least dense or absent.**

If health and the abundance of kelp beds in the area are not properly maintained within the proposed aquatic farm site, project modifications to the aquatic farm operations permit will be made to correct the condition.

Anadromous Fish Streams: The proposed project site is not located within 300 feet of the mouth of an anadromous fish stream catalogued by ADF&G for various salmon species[3]. The proposed farm gear structures will not significantly affect fish rearing habitats for salmonids and other marine fishes in the area and will allow adequate fish passage for salmonid adults (chum, coho, and pinks) that may be milling or migrating through the area.

II. Existing Uses not Significantly Altered: The proposed aquatic farm site will not significantly alter an established use defined in regulations as a commercial fishery, sport fishery, personal use fishery, or subsistence fishery.

Commercial Fisheries: The proposed aquatic farm is located in ADF&G Commercial Fisheries Division statistical area sub-district 183-10. The proposed aquatic farm site project is not expected to cause any significant alterations to the existing commercial fishery uses in the area. Details on each commercial fishery are listed below.

Geoducks: No commercial geoduck dive fishery took place at the site in 2010.

Sea cucumber: No commercial sea cucumber dive fishery took place at the site in 2010.

Red Sea Urchins: No commercial red sea urchin dive fishery took place at the site in 2010.

Salmon: The waters of Yakutat Bay are open to set gillnet and commercial troll gear. No

[2] NOAA (National Oceanic and Atmospheric Administration), Fisheries, National Marine Fisheries Service. Alaska ShoreZone: Coastal Mapping and Imagery. http://akr-mapping.fakr.noaa.gov/szflex/ (Aaccessed July 2011).
[3]Johnson, J. and K. Klein. 2009. Catalog of waters important for spawning, rearing, or migration of anadromous fishes – Southcentral Region, Effective June 1, 2009. Alaska Department of Fish and Game, Special Publication No. 09-03, Anchorage.

other gear is legal in the Yakutat Area. No set gillnets have been observed in the immediate area of the site. Commercial troll landings have been sporadically recorded from the area, but the site is too far inshore for troll gear to be fished there.

Herring: No commercial fishery for herring has occurred in the area for 30-35 years. Core herring populations spawn in this location. Since 2001, the ADF&G biologists in the direct area of the proposed site have surveyed the area for nine out of the eleven years. All nine years revealed spawning in the Doggie Island vicinity. Although herring is not observed every year, the site is considered by ADF&G to be in a core spawning area. To ensure that the herring populations in core areas are not impacted by the proposed project, the following condition will be added to the operation permit:

> "No in-water aquatic farm activities shall be permitted at the aquatic farm site from **March 15 through May 15** of any year for protection of herring during staging and spawning activities and to allow juvenile herring to hatch, group, and move out into feeding areas. Aquatic farm in-water operations can resume earlier then May 15 with approval from ADF&G, in the event that spawning does not occur on or near the site or if the 21-day period after the last herring spawning required for protection of eggs occurs before May 15. The aquatic farm site is within core Pacific herring spawning areas that are crucial to the Doggie herring stock. All eggs must be allowed to hatch, even though this may result in loss of aquatic farm products being cultured. The Department of Fish and Game shall be notified, in writing, within five days of any herring spawning event that deposits eggs on any farm gear or equipment. Operators shall do their best to notify ADF&G verbally within 24 hours of a herring spawn event. (5 AAC 41.250 (a)(5) and (6))"

Dungeness crab: When statistical area 183-10 was last opened, it was not part of the annual aerial survey so effort data can only be described for the statistical area itself, and not for any of the bays or inlets that are part of statistical area 183-10. Statistical area 183-10 lies within Yakutat Bay.

Table 1: Dungeness harvest (lbs), permits, and landings from statistical area 183-10.

SEASON	HARVEST	PERMITS FISHED	LANDINGS
1990/91	39,681	7	44
1991/92	29,383	13	39
1992/93	16,724	6	48
1993/94	97,298	17	107
1994/95	34,213	15	100
1995/96	52,269	14	140
1996/97	43,460	11	79
1997/98	14,387	9	29
1998/99	7,038	9	40
1999/00	8,524	5	40
TOTALS	168,069	48	146

It is likely that this proposed farm site would have an appreciable impact on the existing subsistence Dungeness fishery, and on Dungeness habitat, in the immediate project area. The proposed farm site is located on the western side of Doggie Island, and is relatively close to Yakutat. The bottom type is listed as sand, mud, cobble, shell, and rockweed in the application. Several eelgrass beds are noted in the project area. Substrates composed of

sand, mud, cobble, and shell are good indicators of Dungeness habitat, and Dungeness are often found near eelgrass beds[4]. In the application, the area is documented as being used by subsistence Dungeness interests. The project footprint is approximately 40 acres. Within the total acreage, 28.4 acres are planned for suspended culture, 5.78 acres of beach are planned to have vexar, flip-flop bag oyster culture, and 6.54 acres are slated for seeding clams (geoduck and littleneck). The suspended culture would occur in the subtidal area. Other than the raft anchors, there would be no benthic impacts in the suspended culture areas, though some subsistence Dungeness fishing effort could potentially be displaced. The flip-flop bags and beach seeding will occur in the intertidal area. Juvenile Dungeness crabs can be very abundant in intertidal areas[5]. Aerial surveys of Southeast have shown use of the nearshore intertidal area by commercial Dungeness interests, often with pots going dry at low water on minus tides. Installation and maintenance of the flip-flop bags could disturb Dungeness habitat. Also, installation of the predator netting and plastic tubes on the seeding sites, and hand digging of clams, could displace, disturb or damage crabs buried in the substrate. Sea otters have likely had some impact on the Dungeness stocks in Yakutat Bay. That impact to Dungeness stocks in Yakutat Bay would be difficult to quantify.

Sport Recreational Fishery: That cove is used by coho and pink salmon when milling before entering local creeks to spawn. A very small number of trollers enter the mouth of that cove when trolling for king salmon. A small number of clam diggers may also use that area. The use of the area for sport angling is limited and is used lightly in the fall for coho anglers. Various salt water fish likely use the area to some extent for rearing habitat. The almost entirely protected nature of the cove makes that area unique within the Yakutat Bay area habitat. The personal use fishery in Yakutat Bay has been closed since 2004 when a survey of Yakutat area Dungeness stocks showed no evidence of stock recovery, but fishing under subsistence regulations still occurs. Since no permit system is in place for the subsistence fisheries the amount of effort and harvest in the area would be difficult to gauge. Due to their design, oyster farms have not seemed to have significant negative impact on anglers. The proposed aquatic farm site is not expected to cause any significant alterations to the existing sport recreational fishery i.e sport angling use as long as long as access is maintained to the area.

Subsistence Use: There is a customary and traditional use finding for Dungeness in Yakutat Bay, so fishing for Dungeness under subsistence regulations is allowed in the proposed farm site area.

Anchorages: This area is not known to have any critical vessel anchorages.

III. Compatible with Fish and Wildlife Resources: The proposed aquatic farm site is compatible with fish and wildlife resources in the area.

Predator and Pest Control Methods: Predator exclusion devices to be used at the proposed site are expected to be utilized in a manner that minimizes impacts on non-targeted fish and wildlife resources in the area.

Sensitive Wildlife: The proposed aquatic farm site is not expected to adversely impact seabird colonies, sea lion haulouts and rookeries, seal haulouts and pupping areas, and walrus haulouts.

Sea Bird Colonies: There are no sea bird colonies identified within 1 mile of the proposed

[4] O'Clair, R. M. and C.E. O'Clair. 1998. Southeast Alaska's Rocky Shores: Animals. Plant Press, Auke Bay, AK. 564 pp.
[4] Foster. 1991. Intertidal Bivalves. A Guide to Common Bivalves of Alaska.University of Alaska Press.152 pp.
[5] O'Clair, R. M. and C.E. O'Clair. 1998. Southeast Alaska's Rocky Shores: Animals. Plant Press, Auke Bay, AK. 564 pp.
[5] Foster. 1991. Intertidal Bivalves. A Guide to Common Bivalves of Alaska.University of Alaska Press.152 pp.

sites.[6]

Eagle Nest: There are no eagle nests within 330 ft of the proposed project site parcels[7]

Sea Mammal Habitat: There are no sea mammal haul outs within 1 mile of the proposed sites[8].

Endangered species: The proposed aquatic farm site will not adversely impact endangered and threatened species recovery and habitat efforts.

IV. Operation and Development Plan:

Increase Productivity: The operation and development plan for this project sufficiently describes how the operation will improve the productivity of the species intended for culture above what would occur in natural conditions using approved methods. Approved methods include predator exclusion, reduction of competing species, destiny manipulation, import of naturally-produced seed, import of hatchery produced seed, programming harvest to optimize growth and shellfish condition, and habitat improvements.

Some items are missing or need to be clarified from this operation and development plan and are listed below in the Request for Additional Information section.

Maintenance: The operation and development plan for this project indicates that support facilities and culture gear and anchoring system will be installed with sufficient anchors and maintained.

Rotation Schedule: The projected rotation schedule is consistent with the life history of the species intended for culture.

V. Species to be Cultured and Site Suitability

The department has not conducted a site suitability study for this site. Based on information provided by the applicant, the proposed site is capable of supporting the activities proposed. The proposed parcels in this aquatic farm operation project are located in an area that is thought to be suitable for suspended and intertidal oyster culture.

V. Request for Additional Information

The applicant needs to provide the following information:

1) Seeding Beaches - It was recommended in a meeting with the applicant, that the applicant drop the intertidal clam beaches highlighted in pink/red along the northern shoreline for beach seeding. This will reduce the total acres by approx. 6.51 acres to 34.21 acres. Any research to determine site suitability and techniques for culturing littleneck clam, purple-hinged rock scallops, and or basket scallops can be done under a Fish Resource Permit (FRP). The applicant can refer to the mariculture site suitability study web site at http://www.adfg.alaska.gov/index.cfm?adfg=aquaticfarming.site and for the FRP web page for the application -

[6] U.S. Fish and Wildlife Service, (current year). Beringian Seabird Colony Catalog -- computer database. U.S. Fish and Wildlife Service, Migratory Bird Management, Anchorage, Alaska 99503.
[7] U.S. Fish and Wildlife Service, Migratory Bird Management. Alaska Bald Eagle Nest Atlas-computer database. 2008.
[8] Analysis completed by NOAA Fisheries Service, Alaska Region, Protected Resources Division. Specifically, the data used to complete this analysis were provided by researchers from NOAA Fisheries Service, Alaska Fisheries Science Center, and National Marine Mammal Laboratory.

http://www.adfg.alaska.gov/index.cfm?adfg=otherlicense.aquatic_overview. A study plan is needed for an FRP application. None of the organisms used in this research can be commercially sold.

2) FLEP Bag Intertidal Sites

    a) Need coordinates for these sites.

ENVIRONMENTAL RISK ASSESSMENT: The applicant has submitted a signed environmental risk questionnaire. The questionnaire asks for information on potentially hazardous materials, such as plans for onsite storage of fuel or chemicals. The applicant has indicated that no on-site use, storage, transport, disposal, or otherwise, of any petroleum products will be used during the course of the proposed activities.

BONDING AND INSURANCE: Bonding, or another form of security, is required under AS 38.05.083 and 11 AAC 63.080. The bond must cover the costs of site cleanup and restoration, any associated cleanup costs after termination of the lease, including any unpaid rentals or other obligations accruing until site restoration is complete. The bond regulations require:

> The minimum security amount for a lease is $2,500. However, if three or more lessees post an association bond to cover all of their leases, the minimum security amount is 50 percent of the amount individually calculated for each lease. The association must designate an agent for notification purposes. The association has the right to be notified of the termination of a lease covered by its association bond. If neither the former lessee nor the association completes the site restoration as required by AS 38.05.090, the department will use the association bond for this purpose, up to 100 percent of the amount individually calculated for that lease. The association may remove a lease in good standing from the coverage of its association bond after a 60-day notice to the department, during which time the affected lessee must make other arrangements to comply with 11 AAC 64.080(b). A lease that is in default or that has been terminated with site restoration still pending may not be removed from the coverage of an association bond.

At this time, the Department does not require these operations to have insurance. Insurance may be required in the future depending on the operation and the policies of the department at the time changes are made to the lease or another lease is issued. Insurance, such as Workman's Compensation Insurance, may be required under other state laws.

GENERAL AREA INFORMATION: Numerous upland areas have cultural sites or are used for community harvest, with access by small boat from Yakutat. Anchorages and access across the tidelands are important to the use of these upland sites. Cultural sites include: a historic village site on Port Mulgrave, abandoned in 1893 and now covered by a graveyard; and various camping places on the north end of Crab Island. Yak-tat Kwaan hosts a Tlingit culture camp for youth every summer in the Ankau. Community harvest occurs in most of the bays, coves, and passages in this subunit. Intensity of use varies. More information is available in the *Aquatic Farming Resources* Report prepared for this plan. Harvest directly from tidelands and shorelands includes digging for cockles and clams, gathering of gumboots, seaweed, sea urchins,and sea cucumbers, pot fishing for shrimp and crab, salmon trolling, and waterfowl and seal hunting. The set net fishery at Humpie Creek attracts an annual average of 12 permit holders, primarily for pink salmon and a small number of coho, with an annual average value of $7,600 from 1981 -1991. Sport fishing and hunting and recreation uses occur throughout this subunit. The lees of the islands are favored for kayaking and other small boat use because strong swells and winds from Yakutat Bay are common. Khantaak Island serves as a barrier island, sheltering the City of Yakutat from the brunt of storm swells and winds from Yakutat Bay and the Gulf. Large boats, particularly non-Yakutat fishing boats, anchor in Rurik Harbor and Deep Bay as an alternative to the boat harbor. Rurik Harbor is 20 fathoms at the mouth, with an open

channel, and a mud bottom that allows anchors to drag somewhat. Deep Bay is 30 fathoms deep at the mouth; ten fathoms deep at the end, and free from the westerly winds common in summer.

TRADITIONAL USE FINDING: The presence of aquatic farm sites should not disrupt traditional and/or existing uses of the area, such as commercial and sport fishing, subsistence activities, boat travel, anchorage and recreation. Through agency and public input, more traditional and existing use information may surface. If such information becomes available, any potential and/or existing conflicts will be addressed in the final best interest finding.

YAKUTAGA AREA PLAN INFORMATION SPECIFIC TO THIS PROPOSAL: The proposed aquatic farm site lies within Management Unit 8B, Subunit 8b1, The Yakutaga Area Plan identifies the tidelands and submerged lands surrounding the proposed aquatic farm as Fish and wildlife habitat, fish and wildlife harvest and Recreation and tourism – dispersed use. The plan classifies state-owned tidelands surrounding the proposed aquatic farm site as Wildlife habitat land and Public recreation land. That plan states that aquatic farming should locate in a place and in a manner that will have minimum impacts on designated primary uses and will not preclude upland uses, including access or planned disposal of land.

A. Aquatic farming and competing uses
Aquatic farming is an allowable use on state lidelands or submerged lands. However, aquatic farming may pose conflicts with existing marine uses. Chapter 3 and Appendix F list existing marine uses in specific areas. Areas with existing marine uses may be available for aquatic farming if DNR determines that:

1. it is possible to site, design, and operate the two or more uses compatibly in the area, or
2. there is no feasible and prudent4 alternative for aquatic farming while one exists for the competing use.

In no case will DNR allow aquatic farming to foreclose access to mineral, timber, important fish and wildlife, or recreation resources unless feasible and prudent alternative access exists.

B. Aquatic farming caretaker facilities
Floating caretaker facilities for aquatic farming operations are allowed in areas where there is no feasible and prudent upland alternative and no significant competing use.

C. Preferred storage sites
Shellfish awaiting test results for paralytic shellfish poisoning (PSP) before shipment should be stored on exposed gravel and sand beaches, or the least biologically active area that provides protection from severe weather conditions, because these sites are less biologically productive than salt marshes or tidal flats.

ENVIRONMENTAL RISK QUESTIONNAIRE: The applicant has indicated that this proposed activity will not generate, use, store, transport, disposal of, or otherwise come in contact with toxic and/or hazardous materials, and/or hydrocarbons.

CONSIDERATIONS: The following criteria set out in 11 AAC 63.050(b) has been considered and represents what is known at this time:

Land Management: There are no known land management policies or designations, other than those in the, the Yakataga Area Plan, and potentially the Tongass Land and Resource Management Plan that may impact this proposal. Measures taken to mitigate impacts on the resources identified in the above-mentioned plans are listed below.

Pending/Existing Uses:

1. There are no known pending use conflicts or potential impacts to nearby communities or residential land due to the placement of this farm at the proposed location.

2. Information available suggests the aquatic farm should not disrupted traditional and existing uses of the site for use as an anchorage, commercial and sport fishing, recreation, and tourism. Issuing a lease for an aquatic farm would not compete with commercial and sport fisheries as access to those resources being sought after would be protected and stipulated in any resultant lease agreement.

   In order to inform the public of their continued access rights, any resultant lease would stipulate the requirement that signs be posted with information that informs the public of their rights of access through the farmsite as well as access to those fish and wildlife resources not being cultured at the aquatic farmsite.

3. There are no historic and cultural resources known to exist in the area.

4. There are no commercial or industrial facilities known to exist in the area.

Public Access: Public access has been and will be protected in accordance with 11 AAC 63.050(b)(6) and 11 AAC 53 and will be addressed in any resultant lease agreement.

Public Trust Doctrine: Any resultant lease agreement is subject to the principles of the Public Trust Doctrine in order to protect the public's right to use navigable waters and the land beneath them for navigation, commerce, fishing, and other purposes.

Mitigation Measures: In addition to the mitigation measures identified above under Pending/Existing Uses, paragraph 2, any resultant lease renewal may include additional stipulations necessary to mitigate conflicts identified during the public/agency comment period

Social, Economic, and Environmental Concerns: There are no known significant social, economic, and environmental effects from the existing lease.

Surface Area: The proposal does not encumber more than a third of the surface area of a bay, bight, or cove in accordance with 11 AAC 63.050(c).

ADVANTAGES AND DISADVANTAGES OF THE PROPOSAL: This aquatic farm could provide opportunities to increase income and diversify the state's economy by utilizing state tide and submerged lands for this purpose. The advantage of this lease on state owned tide and submerged lands would be possible employment opportunities as well as any secondary jobs created or increased from businesses involved in marketing, transport or sale of farmed products.

There are no obvious disadvantages of this activity on state owned tide and submerged lands. The public should be aware that access through the site, as well as access to any of the common property resources not being cultured at the site are public uses that remain intact. Therefore, any resultant lease would stipulate the requirement that there is proper signage of the aquatic farm sites to inform the public of the owner's name, address, ADFG and DNR permit and lease numbers.

RECOMMENDATION: Considering the information known at this time and described within this decision, it appears to be in the state's best interest to proceed forward toward the lease for approximately 31.1 acres more or less to the applicant for shellfish culture. The Department of Fish and Game will not issue a permit for Parcel 1 due to the depth of the water. Therefore, DNR must, at this time, eliminate Parcel 1. However, if the

applicant can reduce the number of stacked trays so that at the lowest low tide no gear will make contact with the bottom, Parcel 1 may be reviewed again by ADFG and the DNR for reconsideration. Any resultant lease will include stipulations that may be identified as a result of public comments. Approval of the application is recommended with a security bond set at $2,500 or $1250 with an association bond.

John S. Thiede

John S. Thiede, Aquatic Farm Program Manager

August 15, 2011

Date

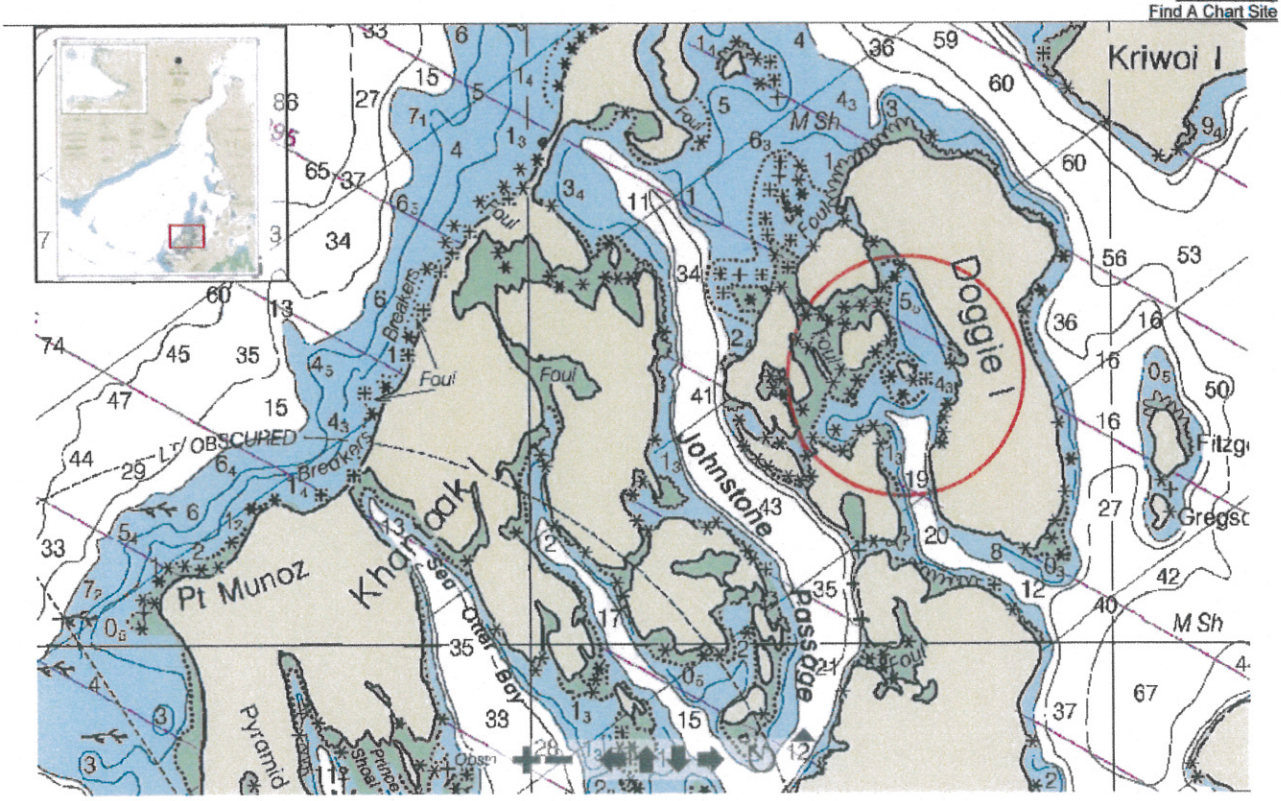
Downtown Yakutat four miles from farm site

Yakutat 250 USGS Quad
Yak-Tat-Kwaan - ADL 108092
Casey Haven 25 Preliminary Decision - 2011

2.5 Miles

Chart: 16761 Edition: 16 Edition Date: November 2000 Clear Dates: NM - 8/6/2011 LNM - 7/26/2011

Download RNC
Notice Listing
Find A Chart Site



- **Click the +/- buttons and drag the slider tool (solid triangle) to zoom in and out.**
- **Click the arrow buttons to pan left/right and up/down.**
- **Drag the navigation box in the upper left hand corner to move around the chart image.**

This chart display or derived product can be used as a planning or analysis tool and may not be used as a navigational aid.

NOTE: Use the official, full scale NOAA nautical chart for real navigation whenever possible. These are available from authorized NOAA nautical chart sales agents. Screen captures of the on-line viewable charts available here do NOT fulfill chart carriage requirements for regulated commercial vessels under Titles 33 and 46 of the Code of Federal Regulations.

Adobe Flash Player is required to view the chart image.
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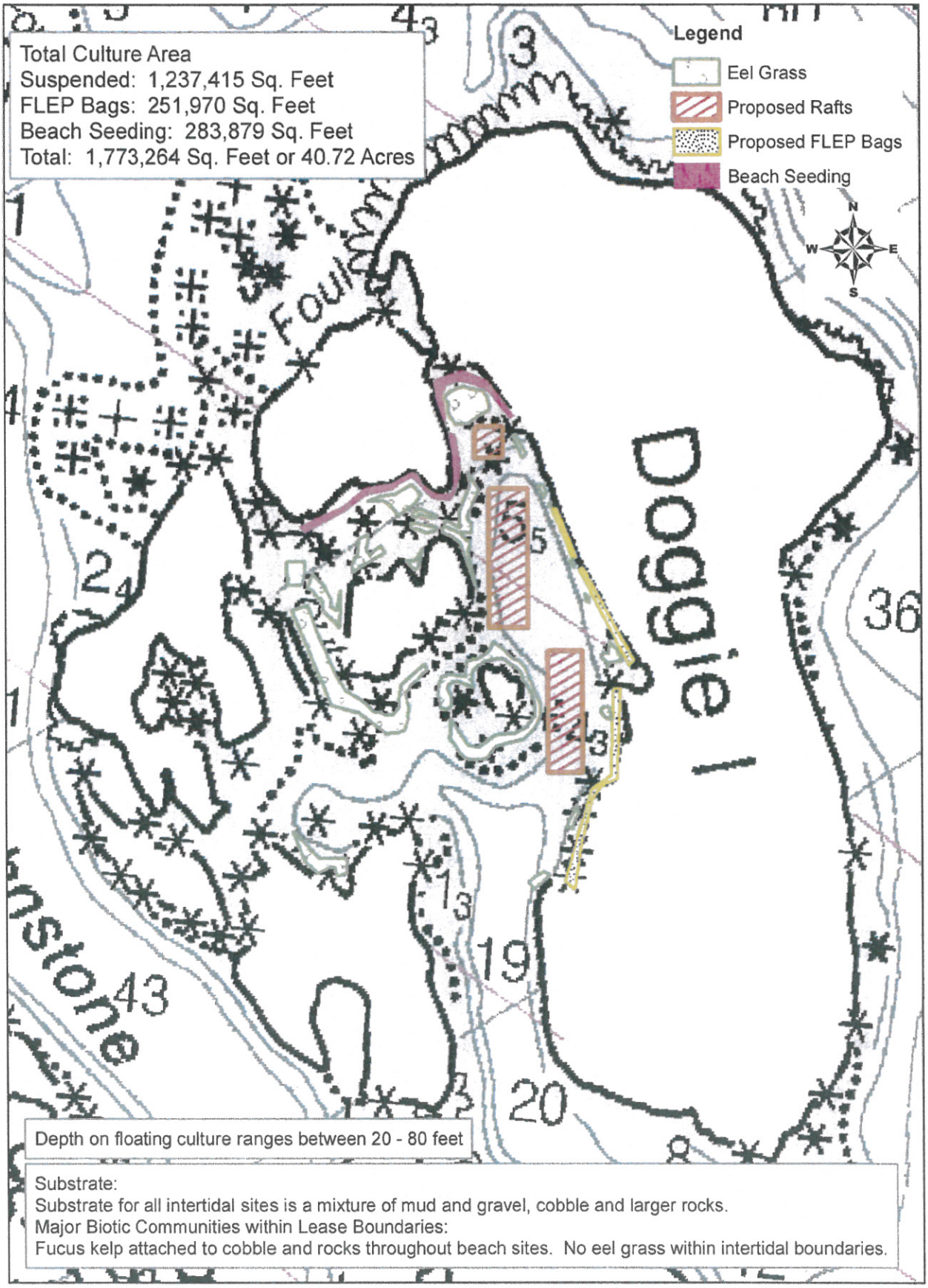
Yak-Tat Kwaan, Inc.
Proposed Dolggi Shellfish Farm Site



0 750 1,500 3,000 Feet

Yak-Tat-Kwaan - ADL 108092
Casey Havens - Preliminary Decision - 2011

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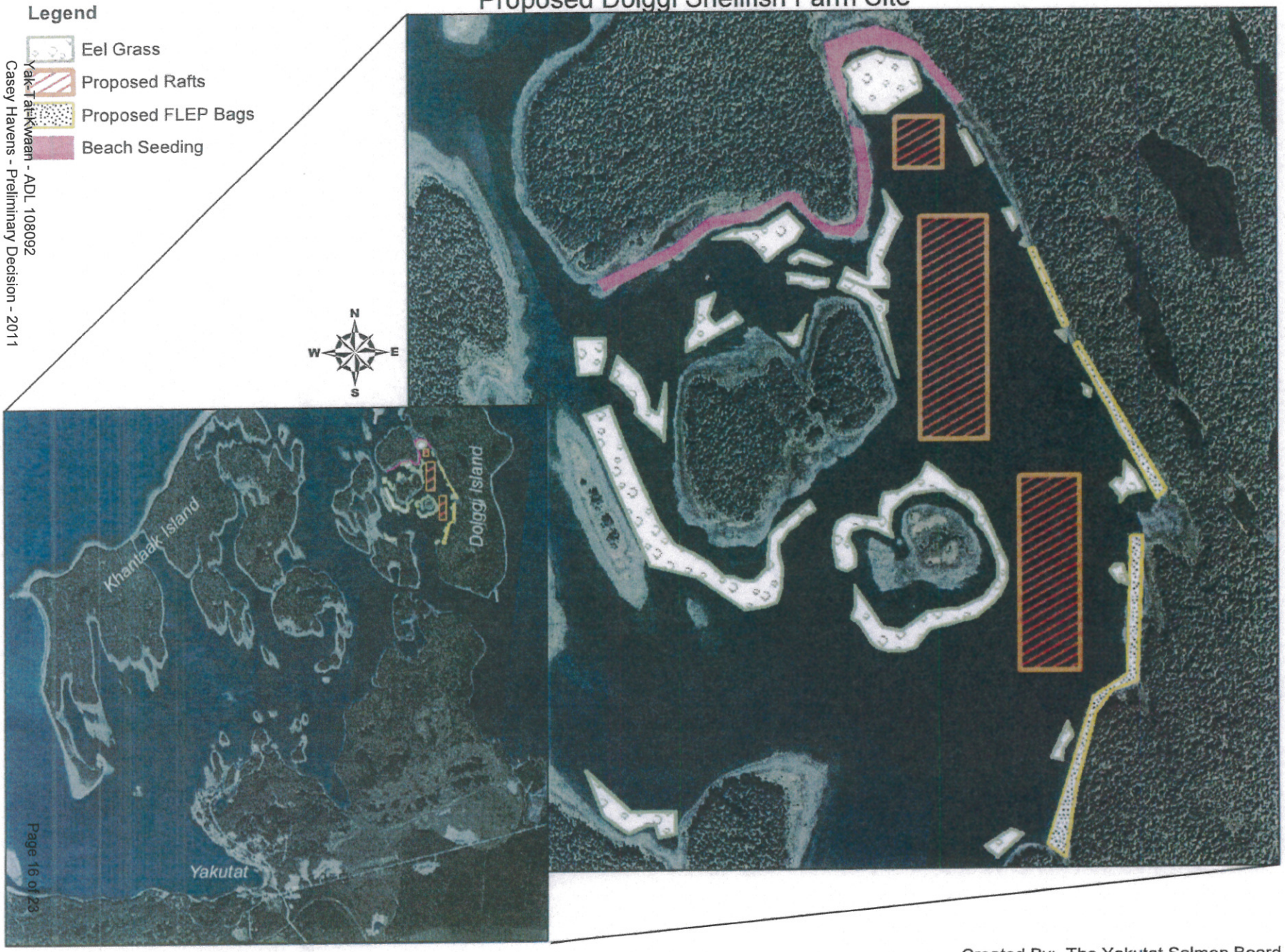
Yak-Tat Kwaan, Inc.
Proposed Dolggi Shellfish Farm Site



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Yak-Tat-Kwaan - ADL 108092
Casey Havens - Preliminary Decision - 2011

Yak-Tat Kwaan, Inc.
Proposed Dolggi Shellfish Farm Site

0 340 680 1,360 Feet

Yak-Tat-Kwaan - ADL 108092
Casey Havens - Preliminary Decision - 2011

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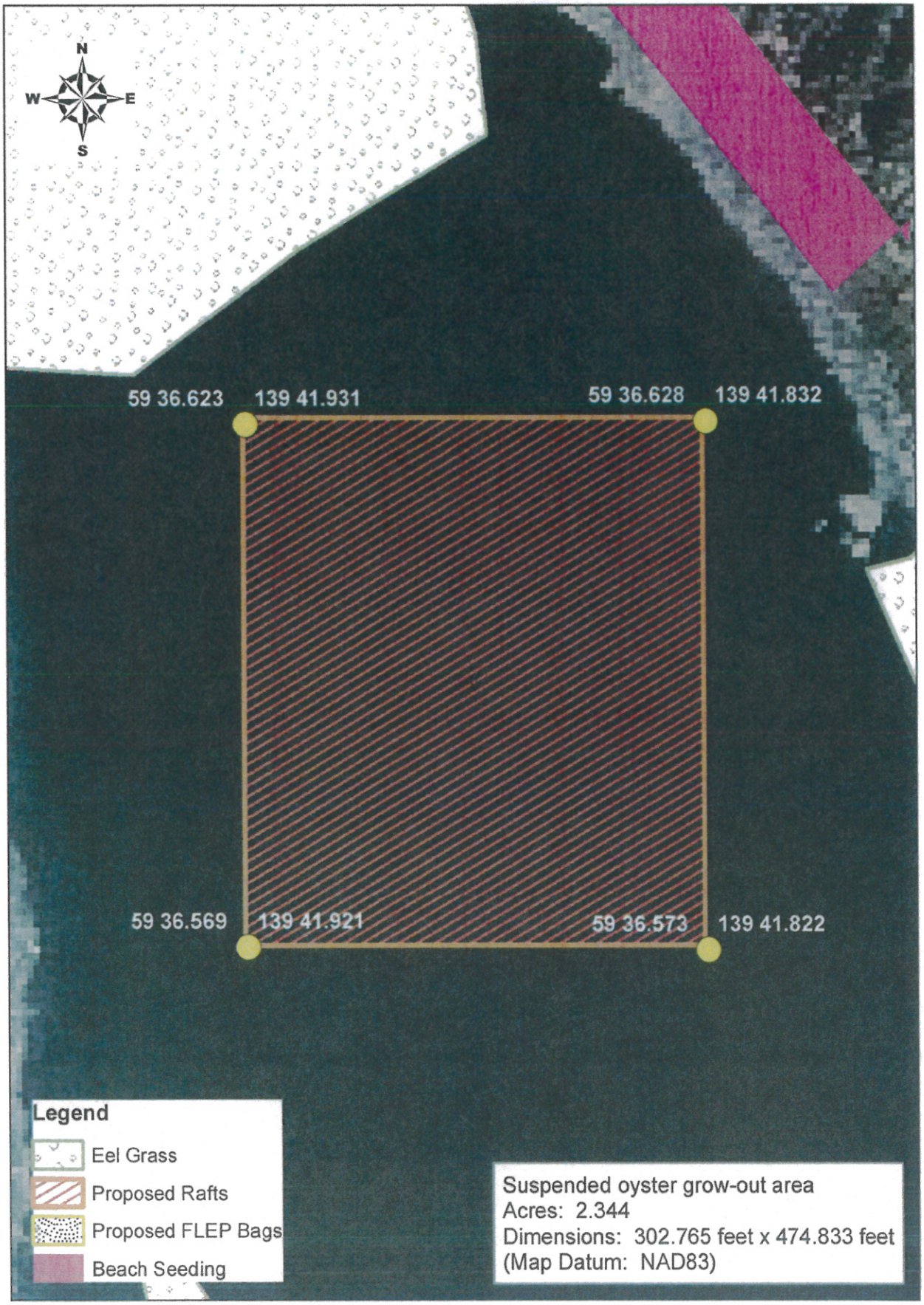
Yak-Tat Kwaan, Inc.
Proposed Dolggi Shellfish Farm Site - Parcel 1



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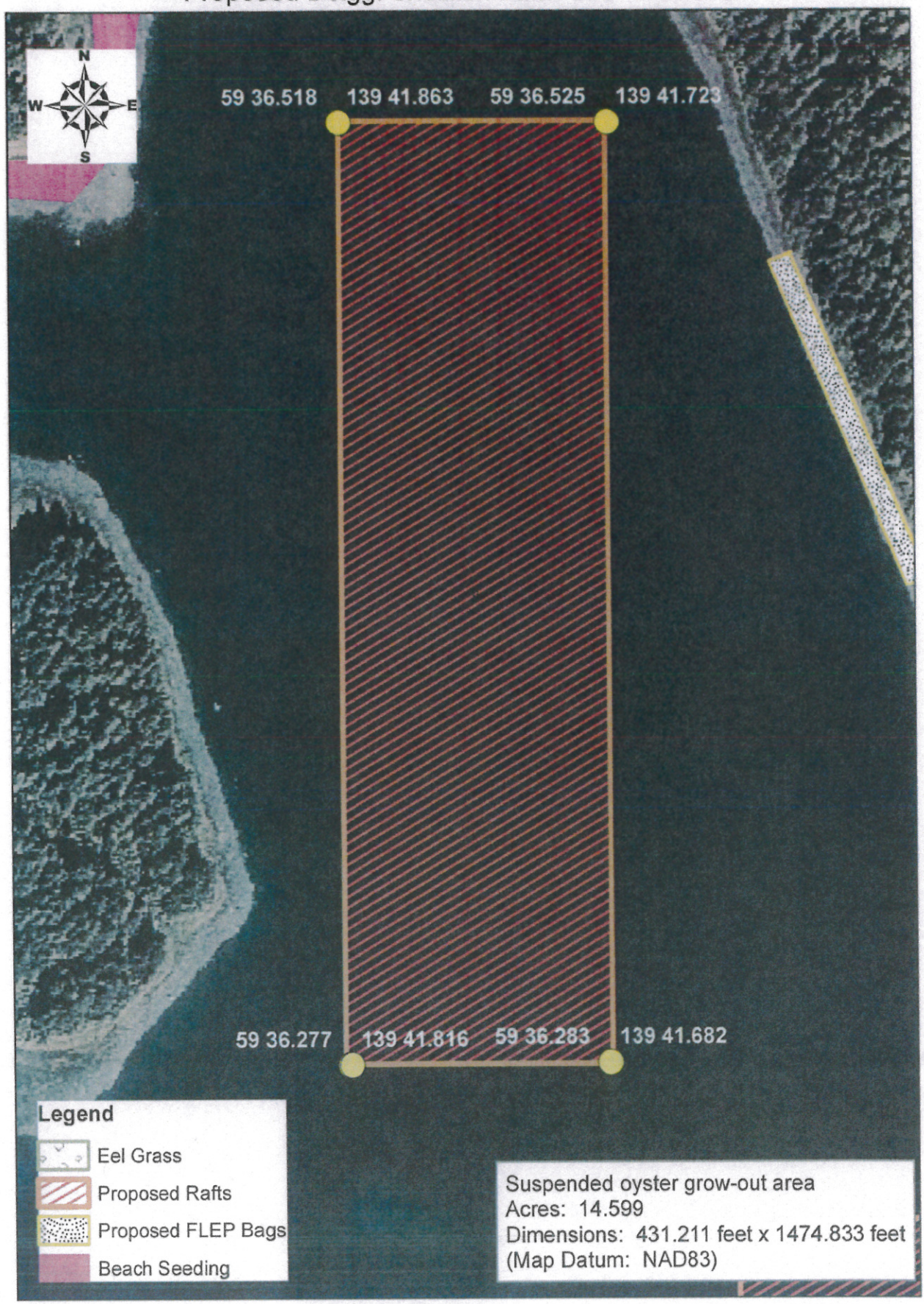
Yak-Tat Kwaan, Inc.
Proposed Dolggi Shellfish Farm Site - Parcel 2



0 135 270 540 Feet

Yak-Tat-Kwaan - ADL 108092
Casey Havens - Preliminary Decision - 2011

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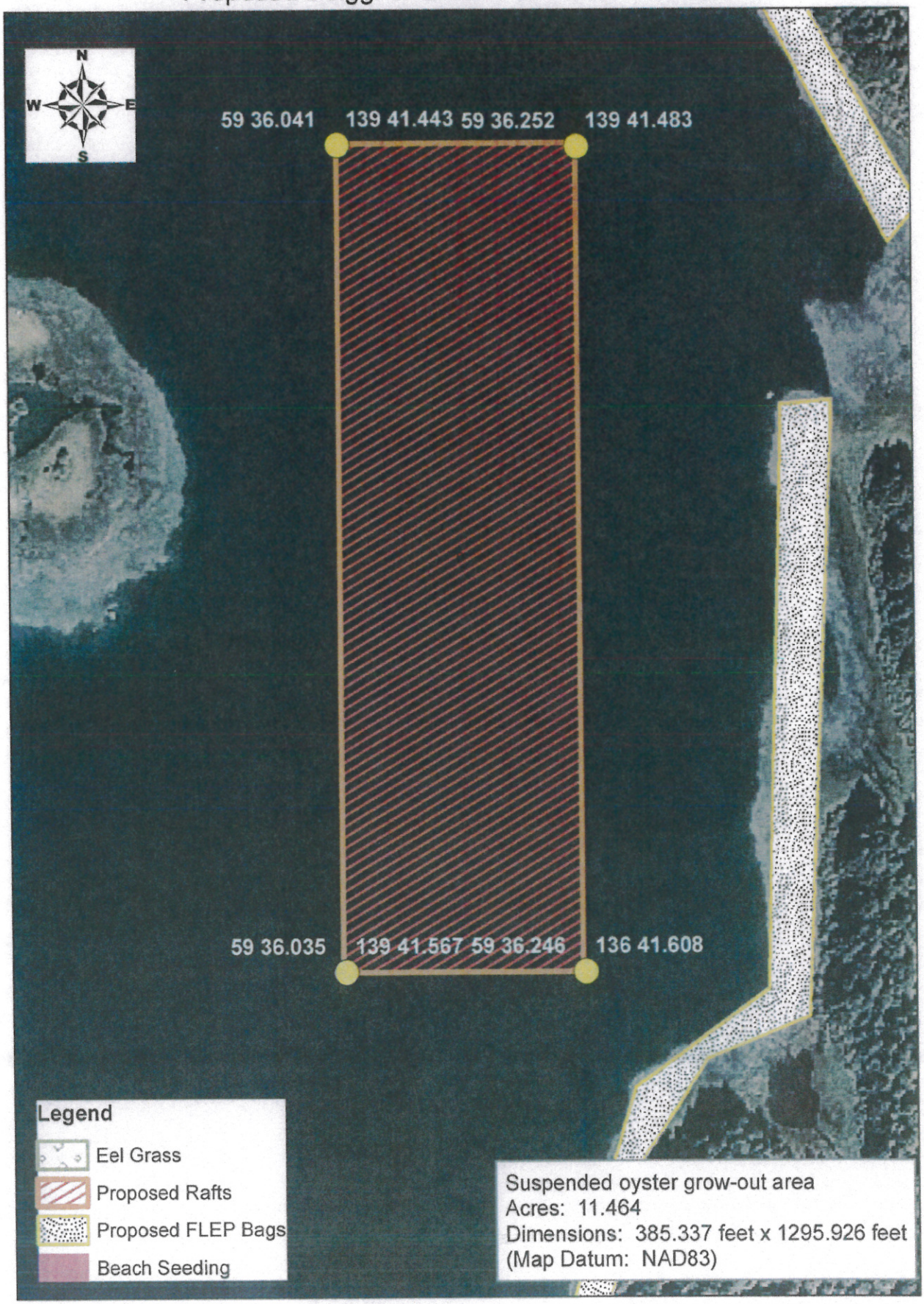
Yak-Tat Kwaan, Inc.
Proposed Dolggi Shellfish Farm Site - Parcel 3



0 135 270 540 Feet

Yak-Tat-Kwaan - ADL 108092
Casey Havens - Preliminary Decision - 2011

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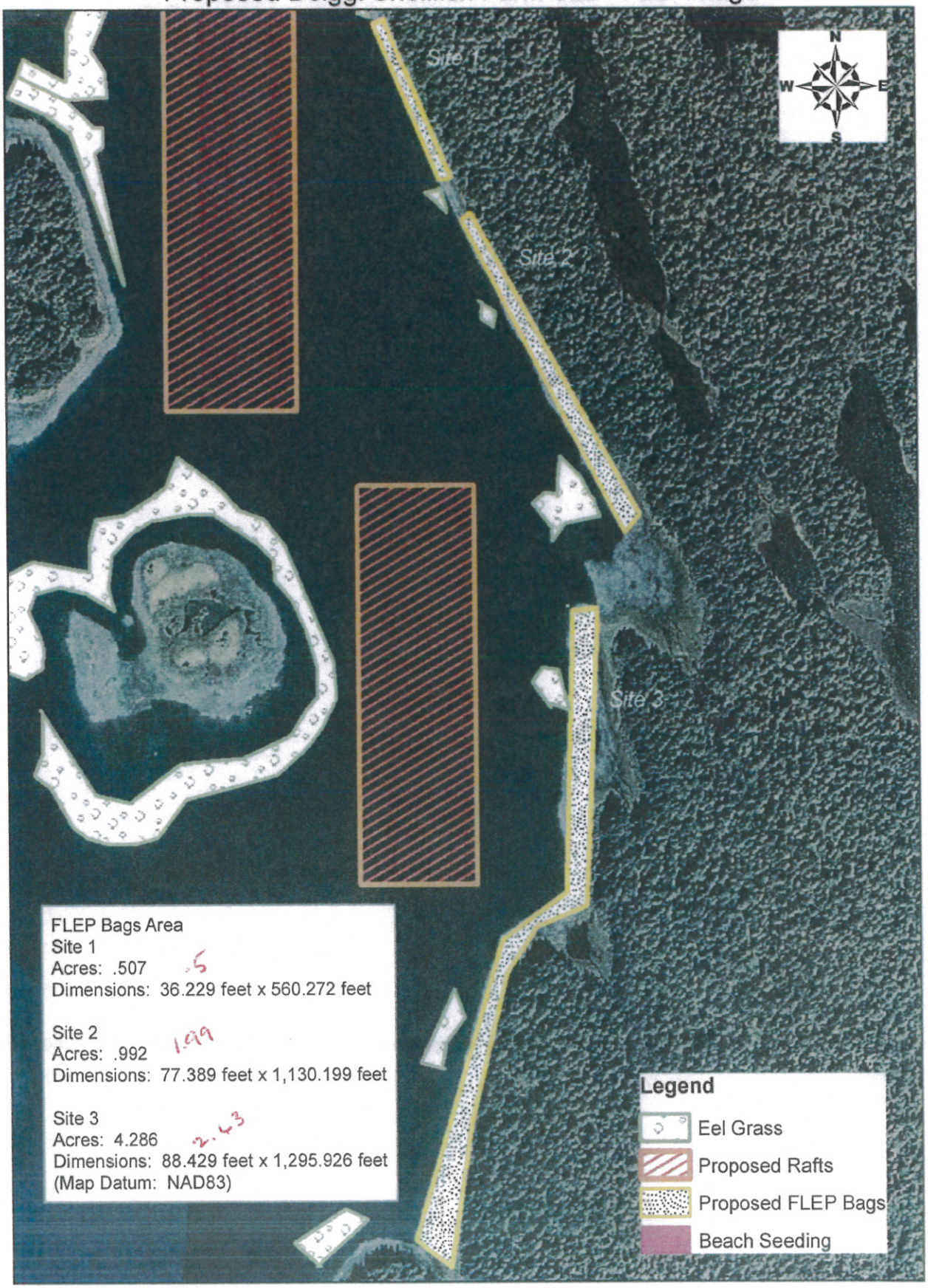
Yak-Tat Kwaan, Inc.
Proposed Dolggi Shellfish Farm Site - FLEP Bags



Yak-Tat-Kwaan - ADL 108092
Casey Havens - Preliminary Decision - 2011

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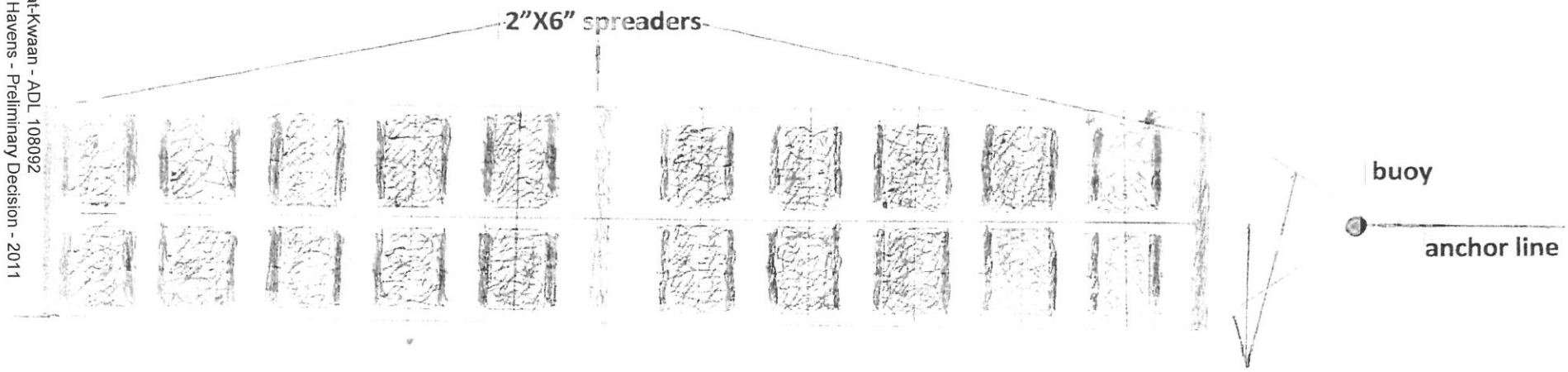
Floating Bag Culture System

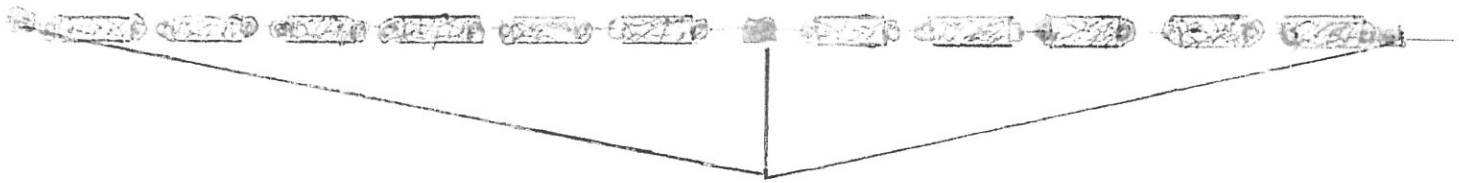
Top View

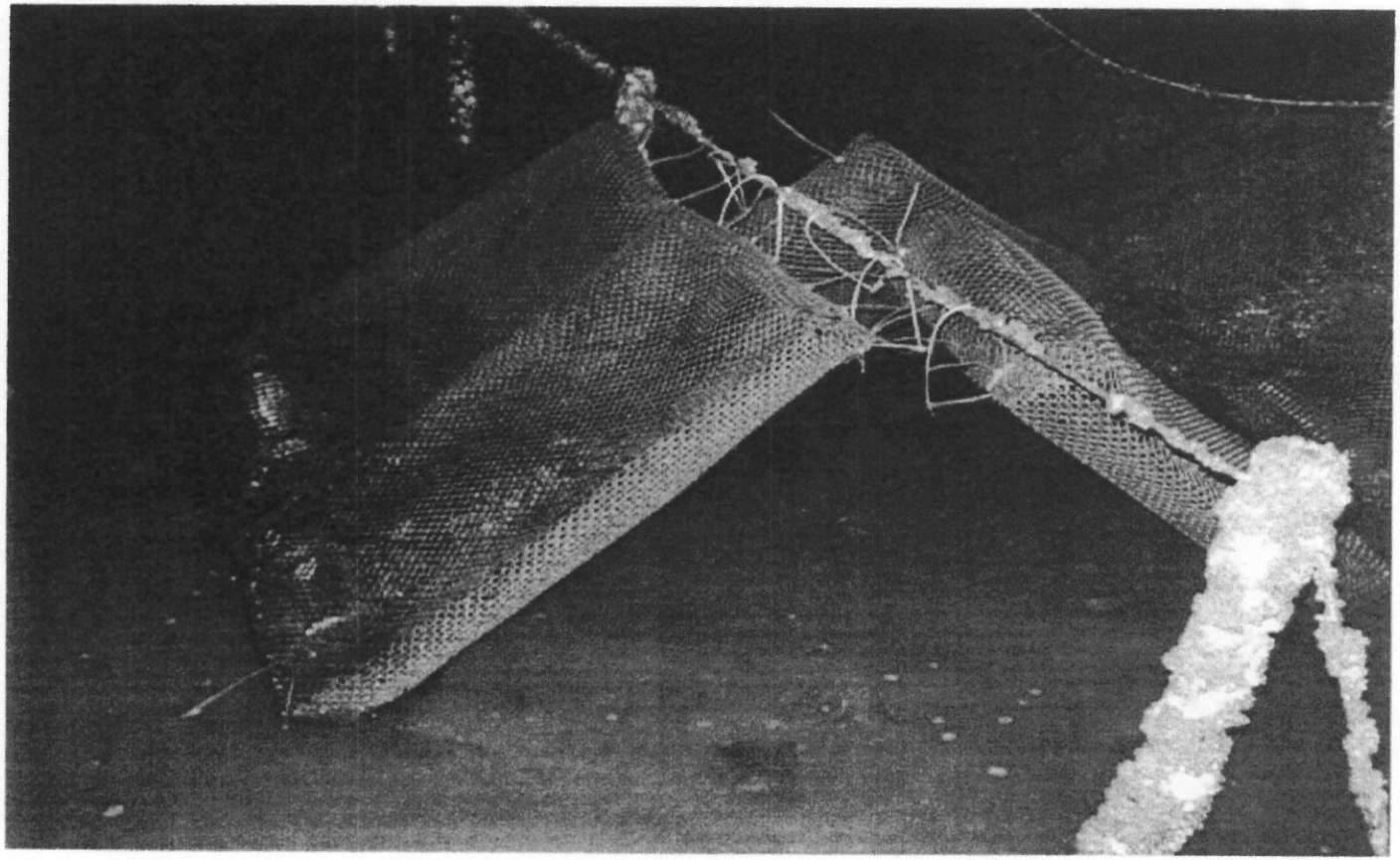


flotation attached
to each side of bags
(high density foam)

Side View

bags with attached flotation





Intertidal Bag Oyster Culture

Example of intertidal bag culture system at John Lentz's farm on Hood Canal. Flotation is provided by one gallon plastic bottles. The posts are PVC pipes anchored by steel fencing pounded three feet into the soft substrate. This won't be possible on most Alaska beaches.